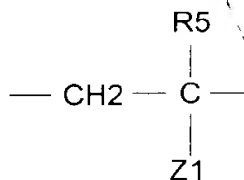


Please amend Claims 1 - 3 as follows:

B2  
Sub C1

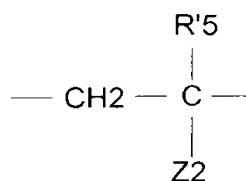
1. (Amended) A cement slurry intended to be set in a wellbore through at least one geologic formation having a certain permeability, characterized in that it comprises cement, at least one mineral filler consisting of silica with grain size ranges between 5 and 200  $\mu\text{m}$ , water and a determined amount of at least one polymer with hydrophilic (Hy) and hydrophobic (Hb) units in aqueous solution, said polymer having the following structure:  $\text{---(Hb)---(Hy)---}$  with a statistical distribution, and:

- Hy has the following form:



where R5 is or CH<sub>3</sub>, and Z1 is COOH or CONH<sub>2</sub> or CONHR<sup>1</sup>SO<sub>3</sub>, or CONHR<sup>1</sup>I, R<sup>1</sup>I is CH<sub>3</sub>;

- Hb has the following form:



where R'5 is H or CH<sub>3</sub> and Z2 is COOR<sup>7</sup>, C<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H, COOR<sup>1</sup>, CONR<sup>1</sup>R<sup>1</sup> or CONR<sup>1</sup>R<sup>7</sup>, R<sup>7</sup> being a non-ionic surfactant consisting of an alkyl polyoxyethylene chain, R<sup>1</sup> is H or a C<sub>1</sub>-C<sub>30</sub> alkyl, aryl or alkyl-aryl radical, and R<sup>1</sup> is a C<sub>9</sub>-C<sub>30</sub> alkyl, aryl or alkyl-aryl radical,

wherein said polymer has a molecular mass ranging between 500000 and 10<sup>7</sup> daltons.

B2  
Cont.

2. (Amended) A slurry as claimed in claim 1, wherein said polymer has a proportion of hydrophobic units Hb ranging between 0.5 and 60 %.

Sub C3

3. (Twice Amended) A slurry as claimed in Claim 1, comprising at least one of the polymers selected from the group consisting of:

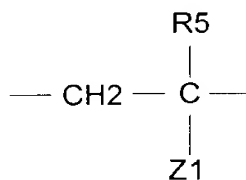
- HMPAM, where R5 is H and Z1 is CONH2, R'5=CH3 and Z2 is COOR'I with R'1=C9H19,
- S1, S2 where R5 is H and Z1 is CONH2, R'5=H and Z2 is C6H4SO3H.

Please add the following new Claims 8 - 10:

B3  
Sub C5

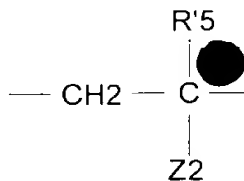
8. A cement slurry intended to be set in a wellbore through at least one geologic formation having a certain permeability, characterized in that it comprises cement, at least one mineral filler, water and a determined amount of at least one polymer with hydrophilic (Hy) and hydrophobic (Hb) units in aqueous solution, said polymer having the following structure:  $-(Hb)-(Hy)-$  with a statistical distribution, and:

- Hy has the following form:



where R5 is H or CH3, and Z1 is COOH or CONH2 or CONHR1SO3, or CONHR'I, R'I is CH3;

- Hb has the following form:



B3  
cont.

where R'5 is H or CH<sub>3</sub> and Z2 is COOR<sub>7</sub>, C<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H, COOR'<sub>1</sub>, CONR<sub>1</sub>R'<sub>1</sub> or CONR<sub>1</sub>R<sub>7</sub>, R<sub>7</sub> being a non-ionic surfactant consisting of an alkyl polyoxyethylene chain, R<sub>1</sub> is H or a C<sub>1</sub>-C<sub>30</sub> alkyl, aryl or alkyl-aryl radical, and R'<sub>1</sub> is a C<sub>1</sub>-C<sub>30</sub> alkyl, aryl or alkyl-aryl radical,

wherein the mineral filler consists of silica whose grain size ranges between 5 and 200 μm and microsilica whose grain size ranges between 0.1 and 20 μm and a small water content of 30 cc for 144 g of solids (cement, silica and microsilica).

9. A slurry as claimed in Claim 8, wherein the polymer is Hb1 where R<sub>5</sub> is H, Z<sub>1</sub> is COOH, R'5 is H and Z<sub>2</sub> is COOR'<sub>1</sub> with R'<sub>1</sub> being C<sub>4</sub>, comprising about 80% of (hy) units, and of molecular mass ranging between 10<sup>4</sup> and 5·10<sup>4</sup>.

10. A slurry as claimed in claim 9, wherein said polymer is Hb1 at a concentration ranging between 0.5 and 5 % by weight.--